

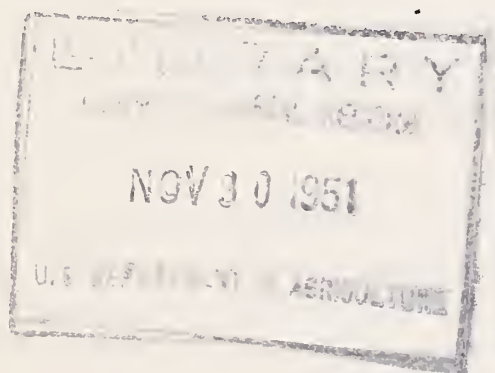
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MARKETING ACTIVITIES



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MARKETING ACTIVITIES

Vol. 14 No. 10

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How Cold Citrus Concentrates?

By H. D. Johnson, W. H. Redit, and Randall Cubbedge

A major need of the frozen food industry is transportation facilities capable of maintaining the near-zero temperatures required to protect frozen foods moved long distances. The U. S. Department of Agriculture, at the request of Florida processors of frozen citrus concentrates, has completed studies of temperatures maintained in railroad cars and motor trucks. The studies, carried on under authority of the Research and Marketing Act of 1946, throw considerable light on temperatures maintained with different types of equipment and point the way to improvement.

Four Tests

Four tests were conducted in 11 refrigerator cars using three different methods of refrigeration--mechanical refrigeration, dry ice (solid carbon dioxide), and water ice plus 30 percent salt.

The lowest temperatures were provided by two mechanically refrigerated cars. In these, concentrate temperatures were maintained within .5 degree of the loading average (1.5° and -3.5° F. in two tests) and reduced 5 degrees from an average of 0° in another test--results that indicate ample refrigerating capacity. The maximum temperature found in these cars was 4°.

Two of the three dry-ice cars maintained average commodity temperatures at or slightly below loading temperatures (-3° and 0.5°). During the transit period the third dry-ice car, which moved in warmer weather, showed a 6.5° rise in average temperature and maximum temperatures as high as 9°.

"Bunkers" are the compartments in cars in which the refrigerating ice is placed. The bunkers may be set along the top of the car, or at the two ends. One of the test cars equipped with overhead bunkers showed a 5.5° rise in average temperature during transit (from -2° to 3.5°). During the transit period the third dry-ice car, which moved in warmer weather, showed a 6.5° rise in average temperature and maximum temperatures as high as 9°.

Another overhead-bunker car had a 5.5° rise in average temperature during transit (from -2° to 3.5°), and a maximum commodity temperature of 11.5°. The average temperature in a similar car used in another test rose from -1° at origin to 7.5° immediately before unloading, with a maximum of 15.5°. The maintenance of lower temperature in the first overhead-bunker car was believed due principally to the brine-retaining

tanks in the car, which appear to be more effective than the overhead-basket type bunker used in the second car.

A large proportion of end-bunker refrigerator cars are equipped with forced-air circulating fans under 7-inch floor racks. One end-bunker-fan car with 1,000 pounds of dry ice on top of the load has a 3.5-degree temperature rise (from 1.0° to 4.5°), with a maximum of 9.5°. Another fan car with paper over the load had a much greater temperature rise during transit, 9 degrees, but the average temperature at destination was 4°, about the same as the first overhead-bunker car and the fan car with dry ice on top of the load. The fan car with ice and salt had the highest temperatures. In this car, product temperatures rose from an average of -1° at origin to 10.5° at destination, and maximum temperatures as high as 18.5° were registered.

Truck Tests

Truck tests were conducted from April through October 1950 with 23 trucks, two using dry ice and the rest mechanical refrigeration. In the dry-ice tests, commodity temperatures rose 8 to 24 degrees above the uniform loading average of -12° F., with an average rise of 19 degrees in 48 hours. This rise was believed due to insufficient insulation in the trailer and poor air circulation (because the load was covered with a heavy tarpaulin).

With regular loading and operation of the mechanical refrigerating units, load-temperature averages at destination ranged from -2.5° to 10°, and average rises up to 9 degrees were recorded. Maximum temperatures of 16° and 18° were found at certain positions in the bottom layers of the loads. These extremes were believed to be caused by inadequate air circulation around the load.

To improve this condition, a return air duct was constructed on the units to draw return air from the floor instead of over the top of the load. In addition, a modified loading plan was put into effect in which channels were provided at each side wall along the floor the full length of the trailer, to increase air movement down the side walls. With these modifications in three tests in which the units operated properly, average commodity temperatures were reduced from 2.5° to -0.5° in one test and from 2.5° to -3° in another. In the third test the average commodity temperatures rose 7.5 degrees because the packages shifted forward under the return air duct, but the load average at destination was only 1° because of the low loading temperature of -6.5°.

Refrigeration capacity was adequate, but mechanical difficulties arose in a number of tests. Some drivers were not trained to maintain satisfactory operating conditions. Shipments should be scheduled and attention should be given so as to eliminate extended lay-overs en route as a result of the closing of destination warehouses over the week-end.

During loading of the rail cars, protection of the commodity from outside temperatures was fairly adequate, but none was provided during loading of trucks. Furthermore, since both rear doors of the truck trail-

ers remained open throughout the loading, the inside of the trailer was exposed to heat from the outside air, and the effects of precooling were reduced materially. The commodity was also exposed to high outside temperatures when pallets or hand trucks were used in loading and unloading.

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1952 Agricultural Conservation Program Announced

The 1952 Agricultural Conservation Program, announced in September by Gus F. Geissler, administrator of PMA, emphasizes conservation for production as well as protection of U. S. soil and water resources.

American farmers will be encouraged and aided in carrying out the soil and water conservation practices which will most effectively help increase production to meet defense requirements and which at the same time will maintain and improve the productivity of U. S. farmland as an assurance of continued abundance. This double aim will guide State and county PMA committees in the selection and adaptation of conservation practices to the needs of each farm.

Through the locally elected PMA farmer committeemen, each farmer in every agricultural county and community will be encouraged to examine his farm and determine the most urgently needed conservation practices. Then he will designate the practices he intends to carry out under the 1952 Agricultural Conservation Program, giving first consideration to the most urgently needed practices and using the limited assistance provided under ACP where it will be most effective.

Farmers will be expected to use the help provided by the Soil Conservation Service, Forest Service, Land-Grant Colleges, Extension Service, Experiment Stations, and other services. Farmers having complete farm plans set up in soil conservation districts will use these plans as a guide in determining the conservation practices to be carried out under the program.

By pinpointing conservation practices to the needs of each individual farm, the program is expected to improve more and more acres on each farm. For instance, if a farmer feels that the assistance most urgently needed on his farm is in helping him to build a system of terraces to keep his topsoil from washing away, then priority will be given to this practice. He will be expected to carry out additional conservation practices without ACP assistance, but program assistance will be concentrated on these "first things first" types of practices.

As in previous years, assistance to individual farmers will be on a share-the-cost basis for the practices approved by the PMA community and county committee for the individual farm. The program is administered locally by elected farmer committees and is available to all farmers in the United States, Alaska, Hawaii, Puerto Rico, and the Virgin Islands. Participation is entirely voluntary, but to qualify farmers must carry out soil and water conservation practices that accord with standards and specifications established for each State.

Raw and Canned Tomatoes Compared

By N. C. Healy

For more than 20 years, canners and growers have been buying and selling cannery tomatoes on the basis of U. S. grades. Many canners buy their raw tomatoes on the basis of U. S. grades, and they often sell their canned tomatoes on the basis of U. S. grades for processed products. These grades define the quality of both the raw tomatoes and canned tomato products, and this quality determines the price received by the grower and the canner.

But is there a close correspondence between the quality of raw tomatoes and the quality of these same tomatoes after they are canned? Can't No. 2 Grade tomatoes, as a matter of fact, be packed into fancy tomatoes and tomato products? Is it necessary for the color requirements for U. S. No. 1 Grade cannery tomatoes to be so high?

These are some of the questions that tomato growers have been asking in recent years when they talked with canners and representatives of the USDA inspection service. To get the answers, the Production and Marketing Administration joined the agricultural experiment stations in Indiana, Ohio, and New York in cooperative research projects.

Purdue University research men set up a small-scale tomato cannery in connection with a tomato juice cannery located near the Purdue station. Researchers at Ohio State University expanded their pilot processing plant near by. At the Geneva, N. Y. station, a pilot tomato juice cannery was built in order that a study of tomato products might be studied. The research was undertaken under the Research and Marketing Act.

Progress Report

Findings obtained thus far from the cooperative research indicate that there is a relationship between the grade of the raw tomatoes and the grade of the finished tomato products, and that lower grade raw tomatoes produce lower yields of lower grade canned tomato products. There seem to be differences in quality relationships between the raw and canned products for some varieties in some areas, but little or no difference among the same varieties in other areas. Work was conducted this year to show the reasons for those quality variations which may be attributed to any one of many factors, such as different varieties, different production areas, or different processing methods. Each of these possibilities is being investigated and evaluated.

The research work was begun during the 1949 tomato canning season at all three stations. The procedure followed was about as follows. To-

tomatoes were brought into the pilot plants. Here Federal-State inspectors segregated the tomatoes into U. S. No. 1's, No. 2's for color, No. 2's for defects, and culls. The graded tomatoes were then recombined to approximate the quality of tomatoes which farmers deliver to the canneries. The reason for grading the tomatoes first instead of taking them as they come was to know everything possible about the quality of the raw fruit before it is processed. The tomatoes were then made up into 100-to-500 pound lots and run through the pilot plants. Detailed results of this work will be available in reports of findings to be issued by the three stations after the studies are completed.

During the 1949 and 1950 seasons, the New York station used the varieties John Baer and Red Jacket. In 1951, three varieties were tested--Red Jacket, Long Red, and Rutgers. Each week for 6 weeks during the tomato canning season, eight lots of each variety were processed into tomato juice. Ninety-six lots were canned in 1949 and 108 lots in 1950. Various processing methods were used to process additional lots of tomatoes to test the effect of the various methods on the quality of the canned product.

In 1950, a few lots were divided; half of them were run through a commercial plant and the other half through the pilot plant, in order to compare the quality differences between a pilot operation and a commercial plant. In the 1951 season, the comparisons were expanded.

Ohio and Indiana

At the Ohio pilot plant in 1949, 95 lots of tomatoes were processed into canned tomatoes, tomato juice, and tomato pulp. The two varieties used were Stocksdale and Rutgers. In 1950, 247 lots of canned tomatoes, juice, and pulp were processed at the Ohio State University pilot plant. Additional lots were tested to check various changes in methods of processing. The Rutgers and Stocksdale varieties were used in 1950. In 1951, the same procedure was followed with the Rutgers and Stocksdale varieties and the Long Red variety in addition. Various methods of processing tomato juice were used in the 1951 season, including the same method used in 1949 and 1950. These methods will be described in a detailed report to be issued upon completion of the 3 years' work. Data also were obtained on several lots of canned tomatoes, juice, and pulp packed in a commercial plant throughout the canning season.

In Indiana, 119 lots of canned tomatoes were packed in 1949. The varieties Baltimore and Rutgers were used. In 1950, the unnamed variety 1361, a cross between Baltimore and Rutgers, was the only variety used. That year, 160 lots of varying grades of raw tomatoes were canned. In 1951, the work was conducted along the same lines followed during 1949 and 1950. The unnamed variety 1361 was again used in 1951.

The findings obtained from the first year's work showed the need for an instrument to measure color of the raw tomatoes as well as the color of the canned products. Such an instrument would have to evaluate tomato color in the same way as the human eye, if it was to serve as a means of checking the accuracy of visual grading practices. The instru-

ment which appeared to have the greatest possibilities was the "Hunter Color and Color Difference Meter." This device was used by all three of the experiment stations for measuring the color of raw pureed fruits and the color of the pureed canned tomatoes, juice, and pulp. Although it appears that this instrument will define the color of tomatoes more accurately than the human eye, further studies and testing are needed before it can be applied in a practical way. It is possible that this instrument, a modification of it, or some other instrument utilizing the same principle of color measurement may be developed which can be adapted to commercial grading of raw tomatoes and processed tomato products. Visual grading will always be needed for judging other quality factors, such as defects.

Each of the three experiment stations will publish the results of its findings when data from the 3 years' work have been compiled and evaluated.

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NATIONAL SCHOOL LUNCH FUNDS APPORTIONED TO STATES, TERRITORIES

Of the total appropriation of \$83,367,491 provided for this year's National School Lunch Program, \$64,625 has been apportioned among the 48 States, the District of Columbia, and the Territories of Hawaii, Puerto Rico, Alaska, and the Virgin Islands.

Funds are apportioned on the basis of the number of children of school age and the per capita income of each State. These funds are used to reimburse schools in part for their local food purchases.

In addition to the funds apportioned to States and Territories, \$17,250,000 is available to USDA for the purchase and distribution to States of foods needed to meet specific nutritional requirements of school children.

The law requires that each dollar of Federal funds disbursed by State agencies to schools this year be matched by \$1.50 from sources within the States if the per capita income in the State equals or exceeds the national average. The matching requirement for any State with a per capita income below the national average is decreased by the percentage by which the State's per capita income is below the per capita income of the U. S. as a whole.

The National School Lunch Program enlarges the market for farm products, and improves the diets of school children by making it possible for participating communities to serve nutritionally balanced noon-hour meals in schools. The program is administered cooperatively by USDA and State departments of education. Last year, almost 1.4 billion meals were served to more than $8\frac{1}{2}$ million children attending 54,000 participating schools.

Storage Situation at Oil Mills

By Donald Jackson

Eighty-five percent of U. S. mills that crush oil from cottonseed, soybeans, flaxseed, and peanuts recently reported to USDA their 1951-52 storage capacity for oilseeds.

In 12 principal cottonseed producing States, mill storage space used solely for cottonseed would hold about 2,462,000 tons. (This figure includes estimates for the mills not reporting.)

The same cottonseed oil mills reported about 4,381,000 tons of storage capacity for all oilseeds. Most of this space is used for cottonseed when it is needed.

In 11 principal soybean producing States, mill storage space used solely for soybeans would hold about 2,178,000 tons.

The same soybean oil mills reported about 2,907,000 tons of storage capacity for all oilseeds.

Anticipated requirements for mill storage capacity during the current season are: Cottonseed, about 2,302,000 tons; and soybeans, about 2,015,000 tons.

Thus, the over-all mill storage situation is favorable for both cottonseed and soybeans.

This information on mill storage space has just been tabulated and adjusted by the Fats and Oils Branch of PMA. The tabulations were based on reports received from the individual mills. The work was done under authority of the Research and Marketing Act of 1946.

Local Shortages

Although estimated mill storage space for cottonseed in the 12 States and for soybeans in the 11 major soybean States appears adequate, limited amounts of both commodities probably will go into mill storage that is not maintained solely for these crops. Some cottonseed and some soybeans will be out of position to move directly into oil-mill storage. And in all the areas, some mills may lack enough storage space. Again, a very large area in the West--California, Arizona and about 20 counties in west Texas--is short of mill storage space for cottonseed. In the accompanying table, the west Texas situation is concealed in the State average. Shown separately, it would appear much like the situation in Arizona and California.

AVAILABLE STORAGE SPACE AND ESTIMATED REQUIREMENT
COTTONSEED MILLS, 1951-52 CRUSH 1/

State	Space available		Estimated requirement
	: Cottonseed only	: All oilseeds:	
	<u>Tons</u>	<u>Tons</u>	<u>Tons</u>
Alabama	156,047	238,714	99,941
Arizona	84,375	84,375	115,790
Arkansas	526,587	960,213	235,322
California	199,400	214,900	294,203
Georgia	101,091	339,022	134,927
Louisiana	91,432	165,492	110,055
Mississippi	337,045	494,746	287,903
North Carolina	86,070	172,784	97,064
Oklahoma	87,948	174,510	75,724
South Carolina	68,875	107,500	61,663
Tennessee	164,903	315,443	201,072
Texas	<u>558,562</u>	<u>1,113,736</u>	<u>588,333</u>
Total	2,462,335	4,381,435	2,301,997

AVAILABLE STORAGE SPACE AND ESTIMATED REQUIREMENT
SOYBEAN MILLS, 1951-52 CRUSH 1/

Arkansas	56,597	57,797	152,516
Illinois	830,848	1,161,498	762,286
Indiana	369,377	376,922	238,686
Iowa	317,719	456,543	233,602
Kansas	12,713	22,104	31,081
Kentucky	99,646	99,646	98,635
Minnesota	52,036	109,698	63,571
Missouri	93,418	197,394	124,006
Nebraska	---	23,377	26,924
North Carolina	37,100	37,100	53,105
Ohio	<u>308,861</u>	<u>365,009</u>	<u>230,540</u>
Total	2,178,315	2,907,088	2,014,952

1/ Estimated available storage capacity adjusted, by State, for each type of mill, from total reported storage capacity. For both cottonseed and soybeans, reporting mills in all States amounted to 85 percent of all mills.

Cottonseed Storage

Storage obviously is not required for the whole cottonseed crop. On the basis of movements in previous seasons, estimates are that in 1951-52 about 35 percent of the crop will be crushed from current receipts during the three fall months. Mill storage will have to be provided for about 40 percent of the crop at the time of maximum space requirements (probably in November). The remaining 25 percent of the cottonseed crop, which will be received this winter and next spring, will require no additional storage space.

In most States, if cottonseed oil mills could maintain the peak operation rate they attain in the fall, they could crush the 1951 crop in 7 to 9 months. The usual rate for the entire season, however, is about 70 percent of that maximum.

Soybean Storage

For soybeans, the mill storage situation is not far different from that for cottonseed. Compared with 90 percent for cottonseed, storage space for all oilseeds at soybean mills for the 11 States is reported to be only 44 percent greater than estimated requirements. This includes space reported as available for soybeans at cottonseed oil mills in the soybean States. Storage reported to be used for soybeans only is more than sufficient--108 percent of requirements. Arkansas is short 95,000 tons, or 60 percent of the indicated mill storage requirement of the Arkansas crop. Presumably more Arkansas soybeans than usual will have to be stored at mills outside the State, on farms, and at intermediate points. Kansas, Nebraska, and North Carolina show deficits of mill storage space of 3,000 to 16,000 tons of soybeans each, but these amounts probably will not present serious problems. And in all three States there may be individual mills that will not have enough space.

Soybeans continue to come in at mills later in the season to a greater extent than cottonseed. For the 11 States under study, it is estimated that 25 percent of the 1951 soybean crop will be crushed from harvest-time receipts, 45 percent will be stored from the same movement, and 30 percent will reach the mills during the winter and spring, when it will present no additional storage demands.

Scattered reports from the soybean States indicate that farmers will store a larger than usual part of the crop this season, many of them in connection with price-support loans. Any substantial change in farmers' attitude toward the CCC soybean loan program and farm storage will affect the mill storage situation.

Flaxseed and Peanuts

Flaxseed storage in the Southwest presents special problems not considered here. In the main flaxseed area of the northern Great Plains and the Lake States the estimated mill storage requirement for 1951-52 is 220,000 tons. Compared with this requirement, mill storage space used solely for flaxseed is estimated at 50,000 tons. Additional space occa-

sionally used for flaxseed is reported at 278,000 tons. A part of this space is located at soybean mills which also crush flaxseed, but should not be needed for soybeans during the current season.

Peanut oil mills have reported storage space for about 140,000 tons, whereas space required for oil peanuts is now expected to be enough to store 200,000 tons. However, a large percentage of the oil peanuts will be diverted to mills gradually. Also, the cottonseed oil mills report that a large capacity for storing peanuts will be available this season.

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POULTRY MERCHANDISING CLASSES POPULAR

More than 2,800 persons have taken the training course sponsored by PMA for retailers of poultry products, and demand for the classes is greater than the capacity of teaching personnel to meet it. Purpose of the training is to demonstrate to retailers methods of merchandising eggs and poultry meats that are efficient and effective and that also benefit consumers.

As of early October, the 1-day training course had been given in 34 cities in 10 States--Maryland, Indiana, Illinois, Michigan, Minnesota, Iowa, Nebraska, Missouri, Oklahoma, and Texas. Classes are beginning in the northeastern States and later will be started on the west coast.

Trainees are taught how to cut up chicken and turkeys for sale as cut up whole birds and as parts, how to package for self service, how to display poultry and eggs attractively in the retail store, how to grade eggs so that they can assure better supply, how to store poultry products so as to reduce waste and maintain high quality, how properly to price the different chicken and turkey parts, and other factors in good merchandising beneficial to retailers, producers, and consumers.

Authorized by the Research and Marketing Act, the classes are conducted by the Poultry and Egg National Board under contract with USDA.

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STORAGE LOANS

PMA's program of loans to farmers to finance farm storage facilities has been extended to include storages for hay seed, pasture seed, and winter cover crop seeds. Storage facility loans are already available to producers of wheat, corn, oats, barley, rye, grain sorghums, soybeans, dry edible beans and peas, rice, peanuts, cottonseed, and flaxseed. Under this program, CCC lends farmers up to 85 percent of the cost of purchase or construction of the storages. The money is loaned at 4 percent interest and is payable in five annual installments. By July 30, 1951, loans of about \$24,400,000 were approved for farm storages of a combined capacity of over 88,700,000 bushels.

Who Hauls Farm Products?

By Ezekiel Limmer

Ever since motortrucks began to haul substantial volumes of farm products, there has been mounting interest in how trucks and the railroads compare in the volume hauled. Recently this question was investigated with funds provided under the Research and Marketing Act.

Such statistics as were available for the 11 years 1939-1950 were analyzed. They indicate that trucks predominate in the hauling to leading markets of poultry and poultry products, milk, and most types of livestock. Almost all of the receipts of live poultry at principal markets in 1950 arrived by truck; only 1 percent came by rail. The proportion of tonnage hauled by truck was more than 70 percent for shell eggs, milk, hogs, cattle and calves, and dressed poultry.

At the other extreme are cheese and oranges. Trucks hauled only about a third of these products to market in 1950.

The differences in these percentages are the result partly of the distance of the markets from supply areas. The shorter the distance, generally the greater is the advantage of using trucks. But other factors, such as speed and damage, were important in the case of some of the commodities.

Trend Toward Trucks

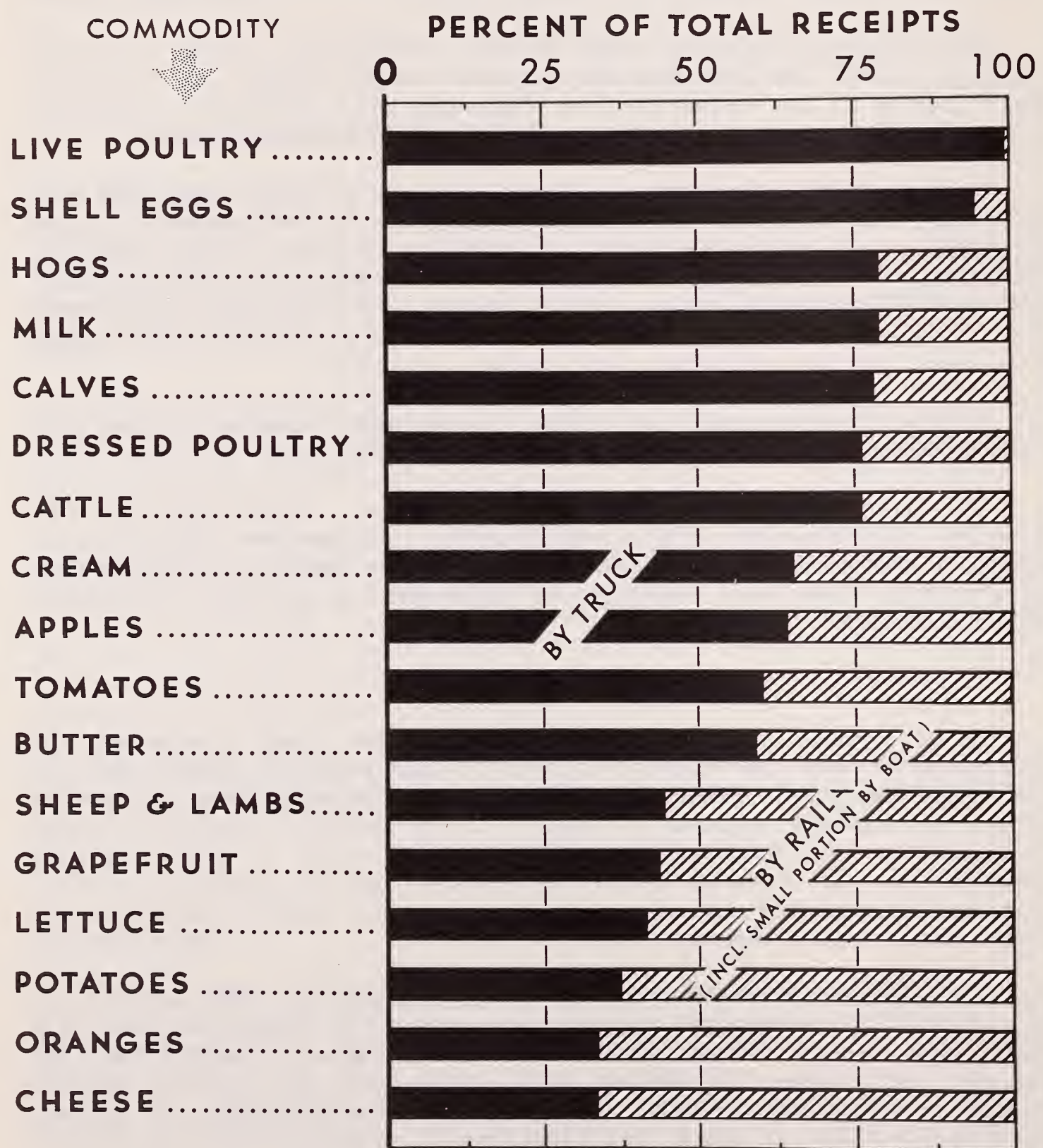
In the years just before World War II, the study indicates, the proportion of total receipts or unloads of farm products handled by rail (and water carriers) generally declined. The trucks gained correspondingly. For example, unloads of apples in the principal markets arrived 50 percent by rail (and boat) and 50 percent by truck in 1939. In 1941 the division was 38 percent by rail and boat and 62 percent by truck. Among the commodities included in the study, only cheese showed the opposite trend before the war.

Although most markets and most of the commodities here under study participated in the general prewar increase in the proportion hauled by truck, some markets did not show the trend for certain commodities. For example, the trucking of apples to San Francisco fell from 66 percent in 1939 to 50 percent in 1941. For tomatoes to Washington, D. C., the percentage hauled by truck declined from 41 percent in 1939 to 34 percent in 1941.

During the war, the trend toward trucks was reversed because of shortages of truck equipment, parts, and fuel. For example, the propor-

PERCENT OF FOOD RECEIPTS BY RAIL AND TRUCK

Major Markets, Selected Commodities, 1950



U. S. DEPARTMENT OF AGRICULTURE

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tion of potatoes carried by truck fell from 36 percent of total unloads in 1941 to 23 percent in 1944. All the commodities included in this study exhibited this turning away from trucks, although for some commodities the wartime trend was very small. For example, the receipts of sheep and lambs by truck were 34 percent of total receipts in 1941. By 1944, when it began to rise again, the percentage had dropped only to 32. For milk, the decline was from 65 percent in 1941 to 61 percent in 1945.

Towards the end of the war, the shortages that had plagued motor transportation began to disappear and the proportion of farm products hauled by truck began to rise. The accompanying chart shows how the competition stood in 1950 (the last year studied) with regard to the major commodities under study. For most of these commodities, the proportion carried by truck was higher in 1950 than in any other year investigated. It should be pointed out, however, that the findings do not necessarily indicate simply a diversion of traffic from rail movement to truck movement over the same routes. At least in part, the findings may reflect relocation of farm production in areas nearer the markets--resulting in a reduction in the distance to market, which generally would favor the trucks.

A detailed report of the study findings has been published by USDA. It is entitled "Transportation of Selected Agricultural Commodities to Leading Markets by Rail and Motortruck, 1939-50." A copy may be obtained from the Division of Economic Information, Bureau of Agricultural Economics, U. S. Department of Agriculture, Washington 25, D. C.

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DEFENSE NOTES

Allotments of controlled materials--steel, copper, and aluminum--for first-quarter 1952 use indicate further reductions in production of farm machinery and equipment, a tightening up in construction materials (which is not expected to affect on-farm building too much), and better availability of metal containers for foodstuffs.

The first-quarter 1952 allotments made by Defense Production Administration on October 12, which are of direct interest to agriculture and related industries, were as follows:

Allotment to the Secretary of Agriculture for construction, on farms, in food and fiber processing and wholesale food distribution, 43,350 tons of steel, 2,440,000 pounds of copper and copper base alloys, and 100,000 pounds of aluminum.

Allotment to the industry branch of the National Production Authority for production of farm machinery and equipment, 527,100 tons of steel, 7,800,000 pounds of copper and copper base alloys, and 6,500,000 pounds of aluminum.

Allotment to the industry branch of NPA for containers and packag-

ing, 1,682,250 tons of steel, 258,000 pounds of copper, and 19,000,000 pounds of aluminum.

(While these figures may be considered preliminary, they are, with the exception of the allotment to containers and packaging, reductions from similar allotments made during the final quarter of 1951.)

Effects of the first-quarter 1952 allotments, as analyzed by USDA specialists, indicate the following:

Farm machinery and equipment: The proposed allocation of controlled materials would restrict first-quarter 1952 production to about 5 percent less than that provided for in the final quarter of 1951. It would permit first-quarter 1952 production at a rate of about 80 percent of the level realized in 1949, whereas the Department has estimated on the basis of a Nation-wide survey that farmers' requirements for new machinery and equipment now are 115 percent of 1949 levels. In other words, production which would be permitted by the first-quarter 1952 allotments will be limited to 70 to 72 percent of estimated requirements. Probably the heaviest cut in farm equipment production now foreseen is in portable irrigation equipment--the result of the heavy reduction of the aluminum available. It is also felt that the imbalance in supplies of controlled materials for the first quarter of 1952 will bring about distortion of the normal pattern of farm machinery and equipment production.

Construction: Although allotments of controlled materials to USDA for the first quarter of 1952 have been cut considerably under those available for the final quarter of 1951, no great effect on on-farm construction is expected since very few of such projects require more controlled materials than can be self-certified by farmers. A pinch may develop, however, in large irrigation or drainage projects where pipe needs are great. Applications for controlled materials for large construction projects, on farms, and in the fields of food and fiber processing and wholesale food distribution, will be very carefully screened. Tighter rules for approval of construction applications, setting forth three basic criteria of essentiality, were announced by USDA on October 19, 1951. (USDA 2536-51).

Containers: First-quarter 1952 allotments for containers and packaging materials, somewhat larger than those for the last quarter of 1951, make the outlook in this field "very good." USDA container specialists feel that metal can (tin can) production will increase over the final quarter of this year and that production of drums and strapping material will be adequate.

Sulfur Restrictions: A new sulfur limitation program announced by NPA on October 16, 1951 is expected to reduce production of phosphate fertilizers and pesticides. Preliminary estimates by USDA specialists indicate that the program means production of dusting sulfur in the 1952 crop year at about 88 percent of the 1951 supply and a 1952 crop-year superphosphate production of 92 percent of 1951. A tight supply situation also is expected in grain fumigants.

Marketing Briefs

(The Production and Marketing Administration announcements summarized below are more completely covered in press releases which may be obtained on request from the Office of Information, U. S. Department of Agriculture, Washington 25, D. C. by citing the code number given at the end of each item.)

Cotton.--In September, exports of all RAW COTTON and SOFT COTTON WASTE were placed under "general license." This action, taken by the Office of International Trade, U. S. Department of Commerce, after authorization by the U. S. Department of Agriculture, makes it possible for exporters to ship all types of these commodities to friendly countries without obtaining export licenses. (USDA 2278-51 and USDA 2323-51).

Dairy Products.--The Federal milk order for the Lowell-Lawrence, Mass., marketing area has been amended to include in the marketing area the city of Haverhill and the towns of Groveland, Merrimac, and West Newbury. (USDA 2308-51)... USDA has given final approval to the merger of the Clinton, Iowa, and the Quad Cities (Davenport, Iowa, and Rock Island, Moline, and East Moline, Ill.) Federal milk marketing orders. Before this merger can be effected, it must be approved by the dairy producers in both areas. (USDA 2408-51)... An increase of 44 cents per hundredweight in the minimum Class I milk price to producers under the Knoxville, Tenn. Federal milk marketing order has been given final approval. Severe drought conditions and the resulting shortages of grains and hay in the area made the increase necessary. (USDA 2497-51).

Fats and Oils.--In September, USDA announced that export allocations on PALM OIL would be discontinued and that the Office of International Trade, U. S. Department of Commerce, was authorized to place palm oil under general license, effective October 1. USDA said at the same time that no limits had been placed on the total quantity of medicinal CASTOR OIL, OITICICA OIL, and COCONUT OIL which might be licensed for export during the period October through December. (USDA 2359-51).

Fruits and Vegetables.--A proposed revision of the U. S. standards for grades of FROZEN APPLES includes a new basis for determining the requirement for carpel tissue, a slight change in color requirements, and new definitions for sizing frozen apples. (USDA 2236-51)... USDA has announced a revision, effective October 25, of U. S. standards for grades of FROZEN SPINACH. The grades, broadened to cover both the whole leaf and chopped styles, are U. S. Grade A or Fancy, U. S. Grade B or U. S. Extra Standard, and Substandard. The factors of color, character, and absence of defects are considered along with other requirements in determining the grade of the product. (USDA 2311-51)... The revised standards eliminate the style of FROZEN CAULIFLOWER referred to as "quarters" and add definitions for "clusters" and "small clusters." A grading factor for "character" has been added to the standards to cover head devel-

opment of the cauliflower, texture, and freedom from ricey and fuzzy units. (USDA 2449-51)... U. S. standards for grades of FROZEN DICED CARROTS have been issued for the first time. The grades are designated as U. S. Grade A or U. S. Fancy; U. S. Grade B or U. S. Extra Standard, and Substandard. (USDA 2235-51).

Grain.--Price support for WINTER COVER CROP SEEDS to be planted this fall and harvested in 1952 includes hairy vetch with a basic national support price of 14.75 cents per pound; common vetch, Willamette vetch, and roughpeas, 6 cents; crimson clover, 16.50 cents; certified reseeding crimson clover, 19 cents; common ryegrass, 7 cents; and blue lupine, 3.50 cents. (USDA 2271-51)... For the first time, U. S. standards for grades have been issued, effective October 15, for grades of FROZEN FIELD PEAS and FROZEN BLACK-EYE PEAS. Designations are U. S. Grade A or U. S. Fancy; U. S. Grade B or U. S. Extra Standard; and Substandard. (USDA 2234-51)... Price support for 1951-crop RICE has been broadened so that rice showing a head yield of less than 25 pounds per 100 pounds of rough rice will be eligible for support at the rate for broken rice. (USDA 2293-51).

Poultry.--With the 1951 turkey crop estimated to be more than one-sixth larger than the previous record, USDA has announced a "standby" program under which it would buy large-size turkeys if it became necessary to help farmers in stabilizing the marketing of their crop. Purchases would be made by PMA through competitive offers submitted by producers, their agents, cooperative organizations, processing firms, and other dealers. Purchases would be limited to ready-to-cook young turkeys of sizes larger than normally desired for family use. (USDA 2482-51).

Sugar.--Under the 1951 sugar crop determination, producers will pay workers wage increases of 10 cents per 9-hour day, instead of 6.5 cents provided in 1950, for each full 10-cent increase in the price of raw sugar above \$6 per hundredweight. The wage-price escalator is geared to average prices for each 2-week period throughout the season. (USDA 2246-51)... Until January 1, 1952, certification by USDA will be required before sugar from Cuba may be entered for direct consumption. Reason for the action is that 80 percent of the sugar which might be entered from Cuba in 1951 for direct consumption has already arrived. (USDA 2296-51)... USDA announced late in September that the sugar export allocation policy announced May 31 has been extended for an additional 4-months period. The extension provides that not more than 135 tons of quota sugar will be licensed for any one country during the period October 1, 1951 through January 31, 1952. (USDA 2370-51).

Tobacco.--Schedules of Commodity Credit Corporation loan rates by grades for 1951 crop Burley, fire-cured, dark air-cured, and Virginia sun-cured tobaccos have been announced by USDA. The grade rates for Burley range from 16 to 70 cents per pound, for fire-cured from 14 to 60 cents, for dark air-cured from 15 to 52 cents, and for Virginia sun-cured from 15 to 48 cents. In 1950 the Burley rates ranged from 14 to 67 cents per pound; fire-cured, 13 to 56 cents; dark air-cured, 13 to 48 cents; and Virginia sun-cured, 12 to 45 cents. (USDA 2506-51).

ABOUT MARKETING

The following publications, issued recently, may be obtained upon request. To order, check on this page the publications desired, detach and mail to the Production and Marketing Administration, U. S. Department of Agriculture, Washington 25, D. C.

Addresses:

Statement by G. F. Geissler, Administrator, Production and Marketing Administration, before Senate Committee on Agriculture and Forestry with regard to farm machinery and other agricultural materials and facilities, September 25, 1951. 20 pp. (Processed)

Statement by G. F. Geissler, Administrator, Production and Marketing Administration before Subcommittee No. 3 House Committee on Small Business with regard to the production of farm equipment by small manufacturers, October 4, 1951. 15 pp. (Processed)

The Coordinated Conservation Program of the Department of Agriculture in Relation to Missouri Basin Development, by Gus F. Geissler, Administrator of the Production and Marketing Administration, U. S. Department of Agriculture, at a meeting of the Missouri Basin Inter-Agency Committee, at Bismarck, North Dakota, October 24, 1951. 11 pp. (Processed)

Publications:

Lard Marketing as Affected by Commercial Processing Methods. June 1951. AIB-53. 37 pp. (PMA) (Printed)

The Comparative Efficiency of Various Arrangements of Railroad Tracks at Stores in Wholesale Produce Markets. June 1951. AIB-55. 39 pp. (PMA) (Processed)

Regulations Governing the Grading, Inspection, Sampling, Grade Labeling, and Supervision of Packaging of Butter, Cheese, and Other Manufactured or Processed Dairy Products. July 1951. SRA-PMA 169. 11 pp. (Printed)

Prepackaging Spinach and Kale. August 1951. Bulletin A-63. 18 pp. (Maryland Agricultural Experiment Station and PMA) (Printed)

Federal Milk Marketing Orders and Dairy Programs in World War II. August 1951. Agriculture Monograph No. 12. 65 pp. (PMA) (Processed)

Parity Handbook. September 1951. 40 pp. (Processed)

Consumer Fruit and Juice Purchases, Apr.-June 1951. September 1951. 57 pp. (Bureau of Agricultural Economics and PMA) (Processed)

Relation of Neps in Card Web, Six Elements of Raw Cotton Quality, October 1951

and Yarn Size to Appearance of Long-Draft Carded Yarn. October 1951.
58 pp. (PMA) (Processed)

Consumer Purchases of Selected Fresh Fruits, Canned and Frozen Juices, and Dried Fruits in August 1951. September 1951. 22 pp. (Bureau of Agricultural Economics and PMA) (Processed)

United States Standards for Grades of Frozen Diced Carrots. September 10, 1951. First Issue. 8 pp. (PMA) (Processed)

United States Standards for Grades of Frozen Field Peas and Frozen Black-Eye Peas. September 10, 1951. First Issue. 7 pp. (PMA) (Processed)

United States Standards for Grades of Frozen Spinach. September 20, 1951. Fifth Issue. 9 pp. (PMA) (Processed)

United States Standards for Grades of Frozen Cauliflower. October 8, 1951. Third Issue. 8 pp. (PMA) (Processed)

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